SYSTEM AND METHOD FOR REDUCING POWER CONSUMPTION IN AN OPTICAL SCREEN POINTING DEVICE

Abstract of the Disclosure

An apparatus for controlling the position of a screen pointer for an electronic device having a display screen includes a light source for illuminating an imaging surface, thereby generating reflected images. The apparatus includes a motion transducer. A lens receives the reflected images and directs the reflected images onto the motion transducer. The motion transducer includes an electronic shutter for controlling the amount of time that light is collected for image frames. The motion transducer is configured to generate digital representations of the reflected images. The motion transducer is configured to generate movement data based on the digital representations of the reflected images. The movement data is indicative of relative motion between the imaging surface and the motion transducer. A controller coupled to the light source turns the light source on only during the time that light is being collected for an image frame.